Good to Know

Perspectives
Graduates of this Master's Program have excellent employment opportunities in both industry and higher education.

Finances
Living in Dortmund is affordable compared to many other cities in Europe. Students may expect a living cost of about 650 € per month including health insurance. Funding for the first semester should be secured before coming to Dortmund as there is only limited time to work. The department has a limited number of part-time employments for successful students after the first semester.

Tuition fee
There is no tuition fee but only an administrative fee of around 210 € per semester. This fee includes a free ride on a large public transport network in and around Dortmund and the whole federal state of North-Rhine Westfalia

Scholarships
There are several scholarships offered either by industrial sponsors or by the German government. For detailed information please contact a German Embassy or Consulate or the Deutscher Akademischer Austauschdienst (www.daad.de).

Contact
For further information please contact:
Technische Universität Dortmund
Co-ordination of Master’s Program
Faculty of Biochemical and Chemical Engineering
D-44221 Dortmund Germany
mailto: master@tu-dortmund.de
Studying in Dortmund

Dortmund is located at the centre of Germany’s largest federal state North-Rhine-Westphalia (NRW). It lies at the eastern end of the Rhein-Ruhr region, one of the largest conurbations in Europe, but is surrounded by more rural green belt areas to the north, east and south of the city.

The former „steel city“ has developed into a modern and cosmopolitan metropolis, and acquired a well deserved reputation across Europe as a location for innovative technological development. Dortmund boasts a booming software industry and is in the immediate vicinity of major centres of the chemical and biochemical industries, which offer extensive opportunities for both internships and part-time work. The university is adjacent to a large technology park hosting both start-ups and established companies in the IT, automation, microsystems engineering, logistics and biotechnology sectors.

Although it is the largest city in the industrial Ruhr region Dortmund is also endowed with extensive parks and woodlands, providing a pleasant and affordable environment with a wide range of cultural, sporting and other recreational possibilities. The Signal-Iduna-Park, home to the seven-time German football champions Borussia Dortmund, is one of the most modern stadiums of the Bundesliga (the German premier league) with a capacity of 80,000 spectators, and was voted the best stadium in the world by the British „Times“ in August 2009. Attending a home match on Saturday afternoon and seeing the massed „yellow wall“ of Borussia fans on the southern terraces doing a Mexican wave is guaranteed to bring out the soccer fan in anybody.

The region has an excellent public transport network. Your student season ticket is valid throughout the entire state of NRW enabling you to travel at will to such cities as Aachen (Aix-la-Chapelle), Koeln (Cologne), Muenster or Duesseldorf. Dortmund station offers fast and frequent intercity rail connections to all major German cities and the local airport serves a variety of European destinations.

Process Systems Engineering

The education in the specialisation Process Systems Engineering prepares the students to work on the design and operation of complex chemical and biochemical production systems using mathematical models and modern computer tools for simulation and optimization. This comprises advanced control and production scheduling methods and the systematic acquisition and analysis of experimental data.

All courses are taught in English. The Master’s program is broad and oriented towards fundamentals but includes also soft skills and languages. The students will acquire a working knowledge of German and technical English and develop their social skills by group projects and seminars. In the final semester, the students work on their master thesis for six months full time.

Layout of the Program

Preparatory Semester

- Introduction to Process Balancing
- Industrial Chemistry
- Fundamentals of Chemical Engineering
- Laboratory Course
- Language Course German (or English)
- Introduction to Process Dynamics and Control

Semesters 1 and 2:

- Modeling and Simulation
- Reaction Engineering
- Fluid Separations
- Particle Technology
- Process Performance Optimization
- Conceptual Design
- PSE Laboratory
- Electives

Semester 3:

- Master Thesis

Ch. Hariharan - the 100th Master Graduate of the Department